



DEVELOPMENT STORM WATER MANUAL

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Note:

This Manual is updated approximately every five-years concurrent with the re-issuance of the National Pollutant Discharge Elimination System (NPDES) Municipal Permit for San Diego County. During the life of this Manual, changes in regulatory requirements, technological advances in available Best Management Practices (BMPs), or better assessment of BMPs' effectiveness may result in changes in the City's requirements. These changes may not result in an update of this Manual; however, the City of Chula Vista reserves the right to impose additional requirements when necessary to assure compliance with NPDES regulations. Any fundamental changes to the Manual will include public participation. The City maintains final discretion for the approval of project submittals. For the latest requirements please contact the City of Chula Vista Engineering and General Services Department or the Department of Public Works Storm Water Management Section.

Abbreviations

ADT	- Average Daily Traffic
BAT	- Best Available Technology
BCT	- Best Conventional Technology
BMPs	- Best Management Practices
CASQA	- California Storm Water Quality Association
CC&Rs	- Covenants, Conditions, and Restrictions
CSWMP	- Construction Storm Water Management Plan
CVCS	- Chula Vista Construction Standards
CWA	- Clean Water Act
CWC	- California Water Code
DCIA	- Directly Connected Impervious Area
ESA	- Environmentally Sensitive Area
HMP	- Hydromodification Management Plan
HOA	- Home Owner Association
IHC	- Interim Hydromodification Criteria
IPM	- Integrated Pest Management
LID	- Low Impact Development
MEP	- Maximum Extent Practicable
MS4	- Municipal Separate Storm Sewer System
MSCP	- Multiple Species Conservation Plan
NOI	- Notice of Intent
NOT	- Notice of Termination
NPDES	- National Pollutant Discharge Elimination System
IOMP	- Inspection, Operation, and Maintenance Plan
RGO	- Retail Gasoline Outlet
RWQCB	- Regional Water Quality Control Board
SIC	- Standard Industrial Classification
SUSMP	- Standard Urban Storm Water Mitigation Plan
SWMFs	- Storm Water Management Facilities
SWPPP	- Storm Water Pollution Prevention Plan
SWRCB	- State Water Resources Control Board
WDID	- Waste Discharge Identification
WQTR	- Water Quality Technical Report

SECTION 1. INTRODUCTION

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SECTION 1. INTRODUCTION

The City of Chula Vista Development Storm Water Manual (Manual) is intended to provide information to applicants for development, redevelopment, and public projects processed through the City of Chula Vista (City) on how to comply with the permanent and construction storm water requirements. This Manual further guides the project applicant through the selection, design, and incorporation of storm water Best Management Practices (BMPs) into the project's design plan. The underlying authority for requirements included in this Manual are derived from the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit), the City of Chula Vista Standard Urban Storm Water Mitigation Plan (SUSMP), and Chula Vista Municipal Code Chapter 14.20. All provisions of this Manual apply equally to private and public projects.

Section 1, "Introduction," provides storm water pollution background information and legal or regulatory requirements associated with storm water pollution control.

Section 2, "Project Review and Permitting Process," outlines the project plan review and approval process for private and public development and redevelopment projects. Applicants should use Section 2 as the roadmap to navigate through this Manual and ensure storm water requirements are accurately and efficiently incorporated into their projects during project review.

Section 3, "Standard Urban Storm Water Mitigation Plan (SUSMP)," lists the permanent storm water BMP requirements for Priority Development Project Categories as defined in Section D.1.d of the NPDES Municipal Permit, Order No. R9-2007-0001. This Section includes Low Impact Development and Hydromodification Management requirements for development and redevelopment projects.

Section 4, "Water Quality Technical Report Guidelines," includes a checklist of specific information to be included in a Water Quality Technical Report and minimum requirements for the preparation of such reports.

Section 5, "Best Management Practices Design Criteria," provides information on national and regional standards for the design and implementation of construction and permanent BMPs. Although design criteria referenced in this section are generally acceptable to the City of Chula Vista, the City reserves the right to exercise sole and ultimate discretion regarding the final approval of BMPs.

Section 6, "Standard Permanent Storm Water Best Management Practices Requirements," provides information on permanent BMP requirements for those development or redevelopment projects that are not Priority Development Projects and do not need to prepare Water Quality Technical Reports. Such projects, however, are

required to implement permanent BMPs, as described in this section, when applicable to the project.

Section 7, "Construction Storm Water Best Management Practices Performance Standards," describes the City's storm water standards for the construction phase of the development projects. It also includes the Advanced Treatment Requirements.

Section 8, "Implementation and Maintenance Requirements," describes requirements for the implementation and maintenance of construction and permanent BMPs for all development and redevelopment projects, including execution of a maintenance agreement with the City of Chula Vista, when applicable.

Section 9, "Definitions" is a list of terms used throughout this Manual and their definitions.

I. Background

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The City of Chula Vista's storm water conveyance system, which collects runoff and rainwater from streets, rooftops, driveways, parking lots, and other impervious areas, flows directly to storm drain systems, channels, creeks, rivers, and San Diego Bay without receiving treatment. The City's storm drainage system is separate from the sanitary sewer system.

Urban runoff potentially contains a host of pollutants, such as trash and debris, bacteria and viruses, oil and grease, sediment, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, flora and fauna, and public health. Urban runoff pollution is not only a problem during the wet season, but also during the dry season due to urban water usage that discharges polluted runoff to the storm water conveyance system.

Land development and construction activities significantly alter drainage patterns and contribute pollutants to urban runoff primarily through erosion, the removal of existing natural vegetation during construction, and the creation of new impervious surfaces, such as parking lots, which often permanently contribute pollutants throughout the use of the project site. When homes, work places, recreational areas, roads, parking lots, and structures are built, these new impervious areas create the potential for a "doubly negative" impact to water quality. The natural landscape's ability to infiltrate and cleanse storm water and urban runoff is "capped" by the impervious surfaces.

As impervious surfaces increase, water that normally would have percolated into the soil, where it can be naturally filtered, now flows over the land surface directly to downstream drainage systems, channels, creeks, rivers, and, eventually to San Diego Bay. Accordingly, increases in impervious cover can increase the frequency and

intensity of storm water runoff. Runoff from new impervious surfaces often becomes a carrier for pollutants such as automotive fluids, cleaning solvents, toxic or hazardous chemicals, detergents, sediments, metals, pesticides, oil and grease, and food wastes.

These pollutants, which are often temporarily captured on impervious surfaces, are transported to storm drainage systems by storm water and urban runoff. These pollutants flow untreated through the storm drainage systems and, ultimately, into channels, creeks, rivers, and San Diego Bay. With the growing concerns of urban runoff and storm water pollution, local, state, and federal agencies devised regulations requiring development planning and construction controls to treat storm water related pollution from new development projects before it reaches any receiving waters.

The Municipal Permit was re-issued on January 24, 2007 to the City of Chula Vista, the County of San Diego, the Port of San Diego, the San Diego County Regional Airport Authority, and the seventeen other cities in the region by the San Diego Regional Water Quality Control Board (Regional Board), and requires the development and implementation of storm water regulations addressing storm water pollution issues in development planning and construction associated with private and public development projects.

Private and public development projects are required to include storm water BMPs during construction and in the projects' permanent design to reduce pollutants discharged from the project site to the Maximum Extent Practicable (MEP). The primary objectives of the Manual are to: (1) Effectively prohibit non-storm water discharges; and (2) Reduce the discharge of pollutants from storm drainage systems to the MEP statutory standard, both during construction and throughout the use of a developed site.

To address pollutants that may be generated from new development once the site is in use, the Municipal Permit further requires the City to require implementation of a series of permanent BMPs described in a document called the Chula Vista Standard Urban Storm Water Mitigation Plan (SUSMP), included in Section 3 of this Manual.

This Manual is intended to provide general information on how to comply with the City's construction and permanent storm water BMP requirements, including the SUSMP requirements, for private and public development projects. All development or redevelopment projects that obtain their Grading, Construction, or Building Permit, or any other required development permit on or after March 24, 2008, are required to comply with the requirements of the NPDES Municipal Permit, Order No. R9-2007-0001 and this Manual. All other development or redevelopment projects that have obtained their Grading or Building Permits prior to March 24, 2008, are required to comply with the requirements of the NPDES Municipal Permit, Order No. 2001-01 and the City of Chula Vista Development and Redevelopment Projects Storm Water Management Standards Requirements Manual dated November 26, 2002.

II. Legal Framework

The requirement to implement storm water BMP requirements for development projects is based on Section 402 (p) of the Clean Water Act. The Federal Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. Under the Federal Clean Water Act, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to stop polluted discharges from entering the storm water conveyance system and local receiving and coastal waters. In California, the State Water Resources Control Board (SWRCB), through the nine Regional Boards, administers the NPDES storm water municipal permitting program.

Pursuant to the Municipal Permit issued by the Regional Board, the City is required to develop and implement construction and permanent storm water BMPs addressing pollution from private and public development and redevelopment projects.